



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBE105W27-PO
Job Sheet 185061



Part No: RBE105W27-PO

Job Qty: 1 ea

Part Name: Main Gear Box Hoisting Device



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/22/18

Job Tracking No:

Due Date: 11/16/18

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBE105W27 Rev.1 IPP Rev. A 18.10.22 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	1 pcs	11/16/18	11/16/18	0.00	0.00	Purchasing		DEC 12 2018
110	Packaging	1 pcs	11/16/18	11/16/18	0.00	0.00	Packaging2		DEC 12 2018
120	QC	1 pcs	11/16/18	11/16/18	0.00	0.00	QC6		38
121	Small Fab	1 pcs	11/16/18	11/16/18	0.00	0.10	Small Fab-5		9-89 DAS
122	QC	1 pcs	11/16/18	11/16/18	0.00	0.00	QC5		38
130	Packaging	1 pcs	11/16/18	11/16/18	0.00	0.00	Packaging3		9-89
140	QC21-FG	1 Ea	11/16/18	11/16/18	0.00	0.00	QC21		DEC 20 2018

Part Op 100 - Issue P/O: _____ MANUFACTURE RBE105W27 AS PER DWG Supplier: METEC Certificate of conformity is required

121 - 1-Engrave placard RB41011 using marktronic engraver as per note 2. 2-Attach placard to -9 as per DWG.

GA 151B

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBE105W27P	Main Gear Box Hoisting Device	1 (1 ea)	100-Purchasing	5137472
3896T31	Ferule 1/16 X 3/8" - Aluminum	1 Ea (1 ea)	121-Small Fab	5024066
CL-2-C	Lanyard Wire	.2500 ft (.25 ea)	121-Small Fab	5093863
RB41011	Dart Tooling Placard, Aluminum	1 Ea (1 ea)	121-Small Fab	5021040

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBE105W27P	1	0	0
121-Small Fab	3896T31	1	702	0
	CL-2-C	0	557	0
	RB41011	1	734	0

Part Specifications

Specifications could not be found.

Plex 10/22/18 12:51 PM dart.Lussier.Patrick



Container No: S137473



Part: RBE105W27

Job No: 185061

Serial No/Batch: S137473

Revision: 1

Inspector:

Exp Date:

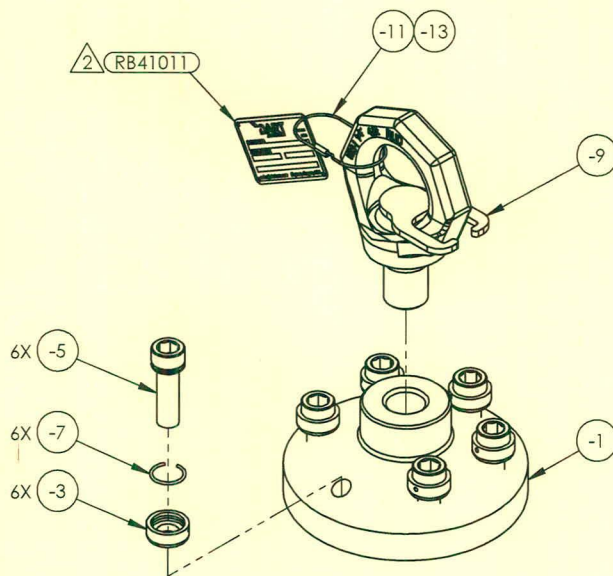
Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 12/12/18

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
1		RELEASED FOR PRODUCTION.	5/26/2017	DPD
				JAG



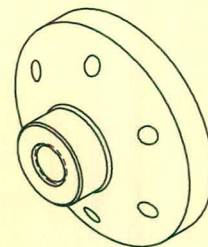
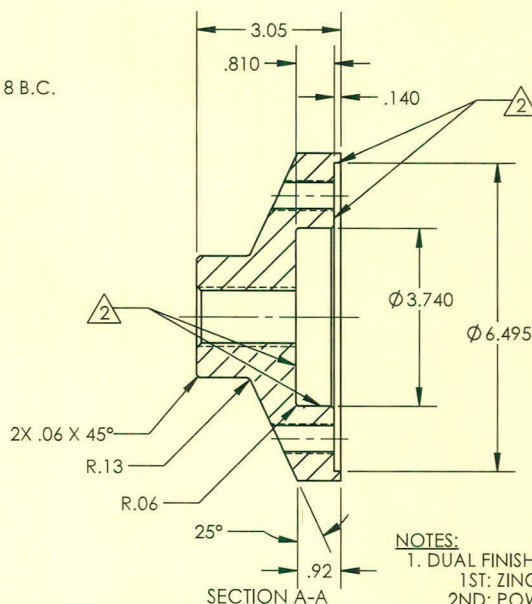
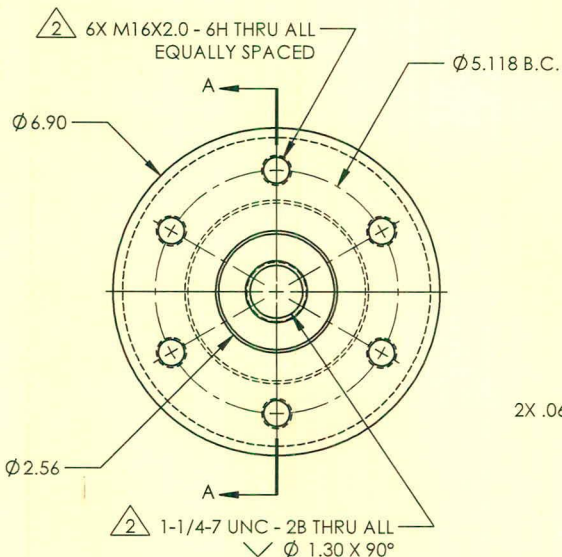
- NOTES:
- REF. AIRBUS T/N: 105W27.
 - ENGRAVE T/N, S/N, SWL 8091 LBS/3670 Kg.
 - USED ON MODEL:
BO 105, BK 117, EC145, EC645, H145, H145M.

DART AEROSPACE																															
TITLE MAIN GEAR BOX HOISTING DEVICE																															
DWG NO. RBE105W27	REV 1																														
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>REAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>FINISH</td> <td>FRACTIONS $\pm 1/8$</td> </tr> <tr> <td>SPEC</td> <td>.XXX $\pm .005$</td> </tr> <tr> <td></td> <td>.XX $\pm .01$</td> </tr> <tr> <td></td> <td>.X $\pm .1$</td> </tr> <tr> <td></td> <td>ANGLES $\pm 5^\circ$</td> </tr> <tr> <td></td> <td>SURFACES = 125</td> </tr> <tr> <td></td> <td>1. BREAK ALL SHARP EDGES</td> </tr> <tr> <td></td> <td>2. DIMENSIONAL LIMITS APPLY</td> </tr> <tr> <td></td> <td>AFTER PLATING</td> </tr> <tr> <td></td> <td>3. INTERPRET DIM AND TOL PER</td> </tr> <tr> <td></td> <td>ASME Y14.5M-2009</td> </tr> <tr> <td></td> <td>USED ON MODEL</td> </tr> <tr> <td></td> <td>SEE NOTE 3</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	REAT	DIMENSIONS ARE IN INCHES	FINISH	FRACTIONS $\pm 1/8$	SPEC	.XXX $\pm .005$		.XX $\pm .01$		.X $\pm .1$		ANGLES $\pm 5^\circ$		SURFACES = 125		1. BREAK ALL SHARP EDGES		2. DIMENSIONAL LIMITS APPLY		AFTER PLATING		3. INTERPRET DIM AND TOL PER		ASME Y14.5M-2009		USED ON MODEL		SEE NOTE 3
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	USED ON MODEL																														
	SEE NOTE 3																														
DRAWN BY: DD 05/01/2017	CHECKED: SM 05/04/2017																														
OPPS APPR: AA 05/10/2017	QA APPR: JL 05/24/2017																														
APPROVED: JAG 06/08/2017																															
SCALE 1:4	DATE 5/1/2017																														
SHEET 1 OF 5																															

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	ADAPTER	4140/4142		2
			-3	6	SPECIAL WASHER	4140/4142		3
			-5	6	SOCKET HEAD CAP SCREW	STEEL	M16 X 2mm X 50mm, CLASS 12.9 (MCMaster-CARR #91290A820) MODIFIED	4
		B/O	-7	6	ROUND WIRE SNAP RING	STEEL	$\varnothing 2mm$ X $\varnothing 25mm$ (FASTENAL #11509175)	1
		B/O	-9	1	LIFTING BOLT	STEEL	1-1/4-7 x 1-7/8, $\varnothing 2-3/8$ I.D., WLL 9920 LBS (FASTENAL #0502648)	1
		B/O	-11	1	LANYARD	COATED STEEL	$\varnothing 1/16$ X 3 (CARR LANE #CL-24C)	1
		B/O	-13	1	FERRULE	ALUMINUM	$\varnothing 1/16$ X 3/8 (MCMaster-CARR #3896131)	1
		B/O		1	DART PLACARD	ALUMINUM	RB41011	1

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REVISIONS			
REV	ECR	DESCRIPTION	DATE



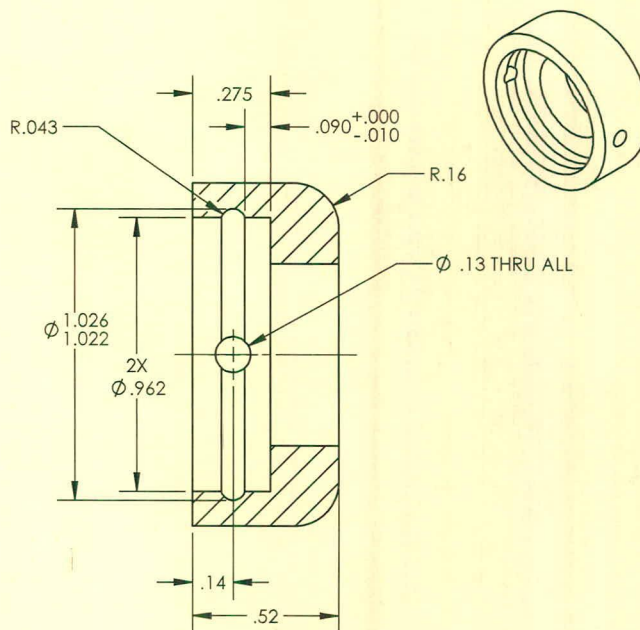
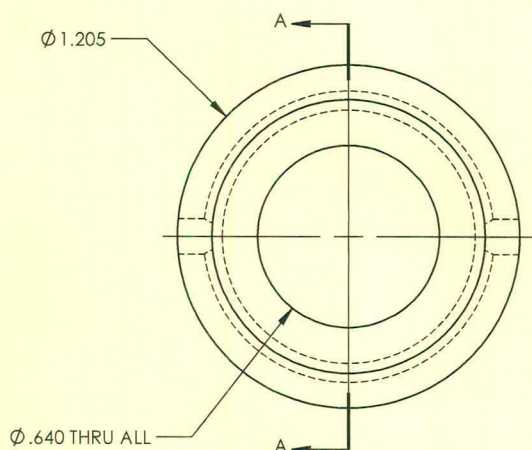
- NOTES:
- DUAL FINISH:
1ST: ZINC PLATE, ASTM B633 TYPE I SC2.
2ND: POWDER COAT YELLOW, FED #13538.
 - NO POWDER COAT THIS SURFACE.

(-1)
ADAPTER

DART AEROSPACE	
TITLE MAIN GEAR BOX HOISTING DEVICE	
DWG NO. RBE105W27-1	REV 1
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
FEAT RC 37-43	DIMENSIONS ARE IN INCHES
FINISH SEE NOTE	.XXX ± .005 FRACTIONS ± 1/8
	.XX ± .01 ANGLES ± 5°
	.X ± .1 SURFACES = 125/
SPEC	1. BREAK ALL SHARP EDGES Ø16 x 46° OR .016R
DRAWN BY: DD 05/01/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: SM 05/04/2017	3. INTERPRET DIM AND TOL PER ASME Y14.6M-2009
OPPS APPR: AA 05/10/2017	USED ON MODEL
QA APPR: JL 05/24/2017	SEE NOTE 3, SHEET 1
APPROVED: JAG 06/08/2017	
SCALE 1:3	DATE 5/1/2017 SHEET 2 OF 5

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED



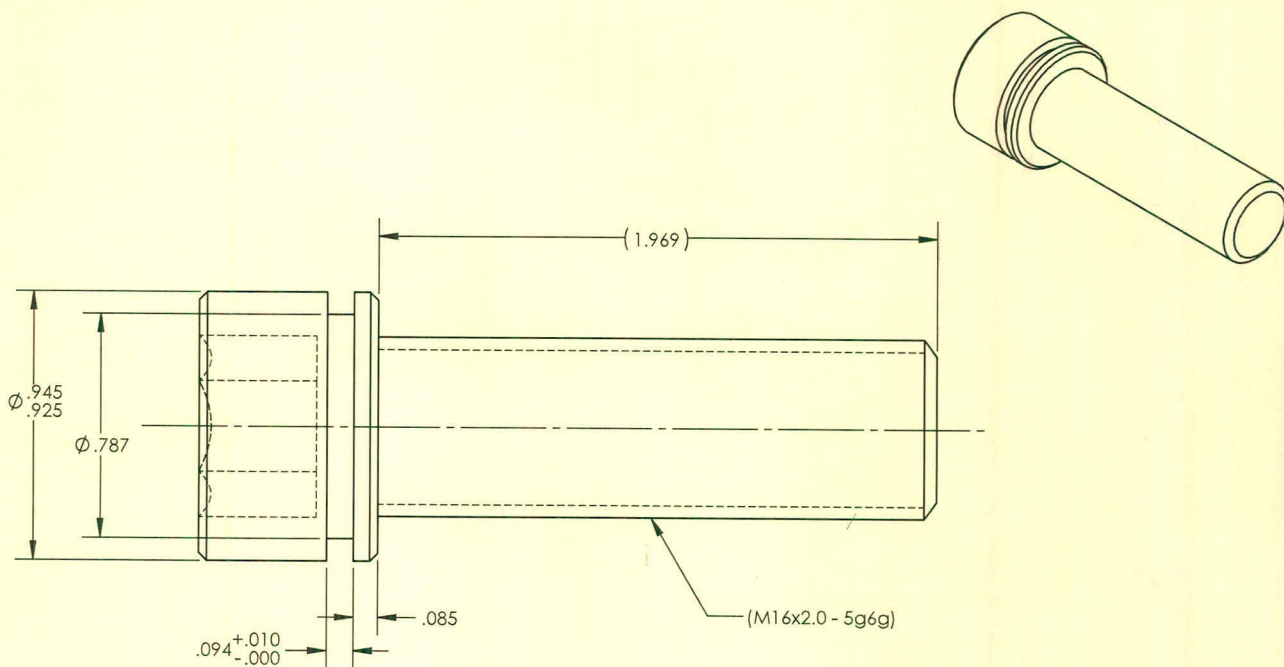
SECTION A-A

(-3)
SPECIAL WASHER

DART AEROSPACE	
TITLE MAIN GEAR BOX HOISTING DEVICE	
DWG NO. RBE105W27-3	REV 1
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
FEAT RC 37-43	DIMENSIONS ARE IN INCHES
FINISH ZINC PLATE	.XXX ± .005 FRACTIONS ± 1/8
SPEC ASTM B633 TYPE 1 SC 2	.XX ± .01 ANGLES ± 5°
DRAWN BY: DD 05/01/2017	.X ± .1 SURFACES = 125
CHECKED: SM 05/04/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 05/10/2017	.015 x 45° OR .015R
QA APPR: JL 05/24/2017	2. DIMENSIONAL LIMITS APPLY
APPROVED: JAG 06/08/2017	AFTER PLATING
SCALE 2:1	3. INTERPRET DIM AND TOL PER ASME Y14.6M-2009
DATE 5/1/2017	USED ON MODEL
	SEE NOTE 3, SHEET 1
	SHEET 3 OF 5

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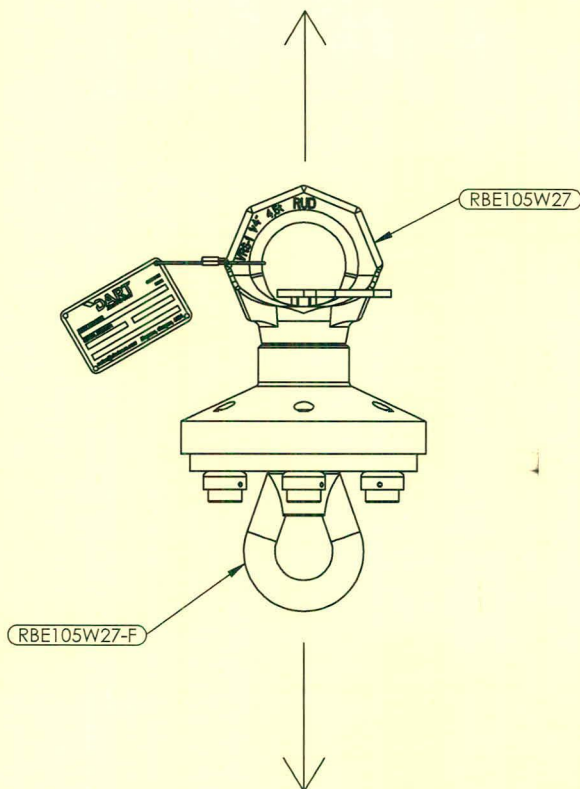
REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



(-5)
SOCKET HEAD CAP SCREW

DART AEROSPACE	
TITLE MAIN GEAR BOX HOISTING DEVICE	
DWG NO. RBE105W27-5	REV 1
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
TREAT	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2 B.O. REV D	.XX ± .01 ANGLES ± 5°
	.X ± .1 SURFACES = 125
DRAWN BY: DD 05/01/2017	1. BREAK ALL SHARP EDGES
CHECKED: SM 05/04/2017	2. DIMENSIONAL LIMITS APPLY
OPPS APPR: AA 05/10/2017	3. INTERPRET DIM AND TOL PER
QA APPR: JL 05/24/2017	ASME Y14.5M-2009
APPROVED: JAG 06/08/2017	USED ON MODEL
SCALE 2:1	DATE 5/1/2017
	SHEET 4 OF 5

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INSPECTION & TESTING PROCEDURES FOR THE
RBE105W27 MAIN GEAR BOX HOISTING DEVICE.
INSPECT THIS ASSEMBLY BEFORE EACH USE.
REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED
OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST

1. AFTER INSPECTION, ATTACH THE MAIN GEAR BOX HOISTING
DEVICE TO TEST FIXTURE RBE105W27-F.
2. ATTACH WEIGHT OF 7,340kg. / 16,182 LBS.
3. LIFT WEIGHT FOR AT LEAST 5 MINUTES, CONTINUALLY
CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
4. REMOVE WEIGHT AND RE-INSPECT SLING, CHECKING FOR
STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR: _____

TESTER: _____

S/N: _____

DATE: _____



190 S. Danebo Ave., Eugene, OR. 97402
1-800-556-4166
e-mail: sales@dartaero.com
dartaerospace.com

TITLE MAIN GEAR BOX HOISTING DEVICE			
DWG NO.	RBE105W27	REV	1
SCALE	1:4	DATE	5/1/2017
		SHEET	5 OF 5



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041411**

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

PO No: PO041411

PO Date: 10/22/18

Due Date: 12/14/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lussier, Patrick Phone:

Attention: Walz, Shigi

Via: Ground

Pynt Terms: Net 60

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Freight Terms:

Special Comments:

Revised

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	185055	RBE105-14101W2P			Outer Needle Bearings Extractor	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$4,100.00/Ea	\$4,100.00
Line Item Note REV 1													
2	185058	RBE105-14101W18P			Pressing-In Tool	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$1,950.00/Ea	\$1,950.00
Line Item Note REV 1													
3	185059	RBE105-45045W1P			Trammel	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$4,900.00/Ea	\$4,900.00
Line Item Note REV 1													
4	185061	RBE105W27P			Main Gear Box Hoisting Device	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$0.01/Ea	\$0.01
Line Item Note REV 1													
5	185063	RBE105-31501W6P			Puller	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$820.00/Ea	\$820.00
Line Item Note REV 1													
6	185064	RBE105-31702W24P			Tail Rotor Fork Shaft Check	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$0.01/Ea	\$0.01
Line Item Note REV 1													
7	185065	RBE105-13101W3P			Disassembly / Assembly - Rotating Control Rod	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$5,050.00/Ea	\$5,050.00



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041411**

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
8	185106	RBE105-14101W12-1P			Mounting Shaft Assembly	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$520.00/Ea	\$520.00
Line Item Note Sub assy on part # RBE105-14101W12 REV 1													
9	185107	RBE105-14101W12-9P			Mounting Base	Firmed	-	12/14/18	1 Ea	0 Ea	1 Ea	\$520.00/Ea	\$520.00
Line Item Note Sub assy on part # RBE105-14101W12 REV 1													
												Grand Total:	\$17,860.02

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

- A005 RIGHT OF ENTRY
- A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
- A012 CHEMICAL AND PHYSICAL TEST REPORTS
- A016 PERSONNEL QUALIFICATION
- A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
- A026 CERTIFICATION OF MATERIAL CONFORMANCE
- A041 QUALITY MANAGEMENT SYSTEM
- A042 DART NOTIFICATION BY SUPPLIER
- A043 RETENTION OF QUALITY DOCUMENT
- A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM
- A049 SUPPLIER AWARENESS

Plex 12/11/18 9:11 AM dart.Lussier.Patrick

Packing List

Bill Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Ship Dart Aerospace Ltd.
To: 1270 Aberdeen Street
 Hawkesbury, ON K6A 1K7
 Canada

Shipment No: 24373
Shipment Date: 11-Dec-2018
Ship Via: our truck
Order Number: 3112
Order Date: 10/24/18

Customer Code: DART
Phone: (613) 632-9577
PO Number: PO041411 ✓
Terms: Net 60 Days

----- Quantity -----										
<u>Item</u>	<u>Open</u>	<u>Shipped</u>	<u>B/O</u>	<u>Canceled</u>	<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Number</u>	<u>Job</u>	
4	1	1 ✓	0	0	EA	DART-RBE105W27P Main Gear Box Hoisting Device		3112-04		DAC 38 9-89

The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.

Received In Good Order By



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev#	P.O. Number
1	DART-RBE105W27P	Main Gear Box Hoisting Device	1	41441
		Material supplied by METEC		

DAS
38
9-89

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.


George Theoret

Vankleek Hill, December 11, 2018

RECEIVED

THE SECRETARY OF THE ARMY

STATEMENT OF COMMISSIONER

IN WITNESS WHEREOF

ATTEST

IN WITNESS WHEREOF

ATTEST

IN WITNESS WHEREOF

ATTEST

IN WITNESS WHEREOF